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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/385,020	08/30/1999	SHUNPEI YAMAZAKI	0756-2023	8609

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EXAMINER

NGUYEN, KEVIN M

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/385,020

**Applicant(s)**

YAMAZAKI, SHUNPEI

**Examiner**

Kevin M. Nguyen

**Art Unit**

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This office action is made in response to applicant's amendment filed on February 2, 2005. Claims 1-6 are cancelled, claims 7-26 are previously presented, claims 27-31 are newly added, and claims 7-31 are currently pending in the application.

An action follows below:

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 7-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Komoto et al (US 6,586,874).

4. As to claims 7, 11, 15, 19, 23, Komoto et al teaches a reflection type liquid crystal panel (fig. 39), comprising an active matrix substrate 32 (fig. 16) and a Fresnel type reflection plate 200 (a counter substrate, fig. 39), the active matrix substrate having a plurality of thin film transistors 35 (fig. 16), a plurality of pixel electrodes 34 (fig. 16).

A battery cells (col. 10, line 40).

The LED lamps 22d, 22e and 22f emitting R, G, and B colors are arranged in the installation section 25d (fig. 23a, col. 22, lines 47-49).

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A Fresnel type reflection plate 200 (a reflection plate, fig. 39), the light emitting diodes (22d, 22e, 22f, fig. 30) interposed therebetween, the light emitting diodes (22d, 22e, 22f, fig. 30) and the Fresnel type reflection plate 200 (the reflection plate, fig. 39) arranged horizontally with respect to the liquid crystal display (fig. 16).

White light emitted from the light source 22 (col. 34, lines 44-53) is introduced into the liquid crystal panel from sides of Fresnel type reflection plate 200 (the counter substrate, fig. 39) of the liquid crystal panel (fig. 37).

5. As to claim 8, Komoto et al teaches a Fresnel type reflection plate (200, fig. 39).

6. As to claims 9, 14, 18, 22, 26, Komoto et al teaches the notebook type computers (col. 10, lines 40-41).

7. As to claims 10, 12, 16, 20, 24, Komoto et al teaches the pixel electrodes comprise metal/insulating film/metal (MIM) junction type (col. 18, lines 61-62).

8. As to claims 13, 17, 21, 25, Komoto et al teaches the transparent substrate 32 (fig. 16) is alkali glass (fig. 16, col. 13, lines 38-49); a counter substrate (half mirrors 66A, fig. 36) is a glass.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komoto et al in view of Suzuki et al (newly cited, US 5,999,282).

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11. As to claims 27-31, Komoto et al teach all the subject matter claimed except for except for at least a part of the white light introduced to said counter substrate is reflected on the pixel electrode so as not to pass through the active matrix substrate instead of a polarization plate (fig. 16 of Komoto et al).

However, a coupling prism 5 and a glass plate 4 allow a read light to impinge thereon vertically, and has top surface thereon as an output surface to allow a projection light to output therefrom (see detail in fig. 1, col. 9, lines 35-44), and each of the RGB light is converged on the surface of each the RGB electrodes (fig. 1, col. 9, lines 62-64) have been recognized in the art as equivalent as evidenced by Suzuki et al. Suzuki et al expressly teach that the benefit of using reflection type liquid crystal panel (fig. 1, col. 8, lines 47-51) can be a high availability of light without providing the polarization beam splitter (col. 4, lines 35-36).

Therefore, it would have been obvious to one of ordinary skill in the art to replace the coupling prism 5 and the glass plate 4 in Suzuki et al with the polarization plate (39) to achieve the benefit of displaying the composite color image with a high contrast ratio as taught by Suzuki et al (col. 4, lines 34-35).

Moreover, where the claimed differences involve substitution of interchangeable equivalents and the reason for the selection of one equivalent for another was not to solve an existent problem such substitution has been judicially determined to have been obvious. See In re Ruff, 118 USPQ 343 (CCPA 1958).

***Response to Arguments***

12. Applicant's arguments filed 02/02/2005 have been fully considered but they are not persuasive.

13. In response to applicant's argument that claims 7, 11, 15, 19, 23 recite "a reflection type liquid crystal display panel," at page 8. This argument is not persuasive because Komoto et al teaches Fig. 18 expressly showing the structure of a reflection type image display device (see col. 20, lines 27-29).

14. Applicant argues features in the independent claims 27-31 that are newly recited. Thus, new grounds of rejection have been used. See above rejections.

For these reasons, the rejections based on Komoto et al and Suzuki et al have been maintained.

***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin M. Nguyen  
Patent Examiner  
Art Unit 2674

KMN  
May 25, 2005

  
**XIAO WU**  
**PRIMARY EXAMINER**